REMARKS

Claims 28-43 are pending in the application with claims 28, 29, and 33 amended herein and new claims 34-43 added herein. The amendment to claims 29 and 33 is not related to statutory requirements of patentability. Such amendments made herein now more positively express limitations that were previously inherent in such claims and, accordingly, are not for the purpose of narrowing and do not effectively narrow the scope of such claims.

Claims 28-33 stand rejected under 35 USC 102(e) as being anticipated by Abburi. Claims 28-33 stand rejected under 35 USC 103(a) as being unpatentable over Abburi. Applicant requests reconsideration.

Amended claim 28 sets forth a PVD component consisting essentially of a material having a face-centered cubic crystalline structure. The component is produced by a method that includes inducing a sufficient amount of stress in the component to increase magnetic pass through flux exhibited by the component compared to pass through flux exhibited prior to inducing the stress. Pages 2-4 and 8-9 of the Office Action allege that claim 28 is anticipated by or obvious over Abburi. Applicant asserts that Abburi fails to disclose or suggest each and every limitation of claim 28.

As stated in column 2, lines 27-43 of Abburi, a primary objective of Abburi is to provide uniform deposition. Abburi states in column 19, lines 25-33 that isotropic working and essentially complete recrystallization "so as to relieve work-induced strain are also helpful to providing good uniformity." Abburi describes Sample "C" as not guaranteeing good uniformity specifically because it includes asymmetries (induced strain) due to anisotropic working and/or incomplete recrystallization. Such statements in Abburi directly

contrast the PVD component of claim 28 that includes an amount of induced stress sufficient to increase magnetic pass through flux in comparison to the flux exhibited by the PVD component without the induced stress.

Page 10, lines 4-13 of the present specification describe one possible explanation for why the component of claim 28 can achieve improved pass through flux such as shown in the Figure of the present specification. Thorough review of Abburi does not reveal any disclosure or even a suggestion that induced stress such as set forth in claim 28 can provide a beneficial property. In contrast, Abburi expressly teaches that work-induced strain should be relieved in order to provide good uniformity.

Page 3-4 of the Office Action allege that it is known in the art for target attributes to vary as a function of recrystallizing, annealing, or other treatments applied to the target material during manufacture of the target (column 12, lines 3-19 of Abburi). Applicant acknowledges, pursuant to Abburi column 12, lines 12-15, that alternative target manufacturing processes can be used to create targets according to the Abburi specifications. However, a fundamental distinction between Abburi and the claim 28 component is that the Abburi specifications do not disclose the limitations set forth in claim 28. Accordingly, the statement on page 9 of the Office Action that the Abburi specified product "meets the products limitations required by Applicant's claims" is incorrect.

Claim 28 specifies that the PVD component comprises induced stress and that such induced stress provides a magnetic pass through flux that is greater than the pass through flux that the component would exhibit without the induced stress. As stated above, Abburi expressly states that work-induced strain should be relieved and that induced strain from anisotropic working or incomplete recrystallization prevents obtaining the Abburi objective

of providing good uniformity. Applicant asserts that Abburi does not disclose or suggest and the Office has not identified any teaching that magnetic pass through flux can be increased by providing a PVD component with induced stress, as set forth in claim 28. In addition to not disclosing or suggesting every limitation of claim 28, Abburi expressly teaches that providing the claimed induced stress frustrates the Abburi objective of providing good uniformity. Accordingly, it is improper for the Office to allege on page 9 that the Abburi specified product meets the product limitations required by claim 28. Further, it is improper for the Office to allege that a general teaching in the art that recrystallizing, annealing, or other treatments can influence target attributes somehow discloses or suggests the much more specific limitation set forth in claim 28 of induced stress that increases magnetic pass through flux. Abburi does not contain any suggestion or motivation to provide the claimed induced stress.

At least for the reasons described herein, Applicant asserts that Abburi fails to disclose or suggest every limitation set forth in claim 28. New claims 34-37 depend from claim 28 and are not anticipated or unpatentable at least for such reason as well as for the additional limitations of such claims not disclosed or suggested. The subject matter of new claims 31-34 is supported at least by original claims 3, 7, and 9 as well as pertinent portions of the specification.

Claim 29 sets forth a sputter component produced by the method that includes, among other features, unidirectionally first cold working a component blank to at least about an 80% reduction in cross-sectional area and heat treating the cold worked component blank at least at about a minimum recrystallization temperature of the component blank. The method includes inducing a sufficient amount of stress in the heat

treated component blank to increase magnetic pass through flux exhibited by the heat treated component blank compared to pass through flux exhibit prior to inducing the stress. As may be appreciated from the discussion above regarding the deficiencies of Abburi as applied to claim 28, Abburi does not disclose or suggest a sputter component that includes induced stress to increase pass through flux, as set forth in claim 29.

In addition, Applicant asserts that Abburi further fails to disclose or suggest a sputter component possessing the structure and advantages of the claimed sputter component that is unidirectionally cold worked to at least about 80% reduction in cross-sectional area. Page 5, line 14 to page 6, line 24 of the present specification discuss the benefits of the high level of cold working set forth in claim 29. By comparison, Abburi column 19, lines 25-33 and 43-46 expressly discourage the use of unidirectional working (being a type of anisotropic working). Applicant asserts that based on the express teachings of Abburi, a unidirectional cold worked sputter component blank apparently does not qualify for the criteria described by Abburi. Specifically, Abburi "proscribes or otherwise removes from use" targets that do not meet criteria for non-directional working. As known to those of ordinary skill, unidirectional cold working would not meet a criteria for a target that is non-directional worked. At least for the reasons described herein, claim 29 is not anticipated by or unpatentable over Abburi. New claims 38-42 depend from claim 29 and are not anticipated or unpatentable at least for such reason as well as for the additional limitations of such claims not disclosed or suggested.

Claim 30 sets forth a sputter target produced by the method that includes, among other features, unidirectionally first cold rolling a target blank consisting essentially of nickel, heat treating the cold rolled target blank, and second cold rolling the heat treated

target blank. At least about 70% of a surface area of the second cold rolled target blank exhibits a (200) texture. As may be appreciated from the discussion above regarding the deficiencies of Abburi as applied to claim 29, Abburi fails to disclose or suggest the claim 30 unidirectional cold rolling. At least for such reason, claim 30 is not anticipated by or unpatentable over Abburi.

New claim 43 depends from claim 30 and is not anticipated or unpatentable at least for such reason as well as for the additional limitations of such claims not disclosed or suggested. For example, claim 43 sets forth that the second cold rolling is unidirectional in the same direction as the first cold rolling. The subject matter of new claim 43 is supported at least by page 9, lines 13-16 and elsewhere in the present specification.

Claim 31 sets forth a PVD component that consists essentially of nickel exhibiting a (200) texture over at least about 50% of a surface area at least within selected boundaries and having a sufficient amount of residual stress to exhibit higher magnetic pass through flux compared to pass through flux exhibited absent such stress. As may be appreciated from the discussions herein regarding the deficiencies of Abburi as applied to claim 28, Abburi fails to disclose or suggest the PVD component of claim 31 with residual stress. At least for such reason, Abburi fails to disclose or suggest every limitation of claim 31. Applicant asserts that claim 31 is not anticipated by or unpatentable over Abburi. Claims 32 and 33 depend from claim 31 and are not anticipated or unpatentable at least for such reason as well as for the additional limitations of such claims not disclosed or suggested.

Applicant asserts that claims 28-33 are not anticipated by or unpatentable over Abburi and request allowance of such claims in the next Office Action.

Claims 28 and 29 stand rejected under 35 USC 102(e) as being anticipated by Cole. Applicant requests reconsideration.

The subject matter of claims 28 and 29 is described above. Pages 4-8 of the Office Action allege that Cole anticipates the PVD component of claim 28 consisting essentially of a material having a face-centered cubic crystalline structure. Applicant notes that regardless of whether the cobalt sputter target of Cole contains a fcc phase, Cole does not disclose or suggest a cobalt sputter target that consists essentially of a fcc crystalline structure. At least for such reason, Cole does not anticipate claim 28.

Applicant also asserts that Cole does not disclose all the structural limitations of the claim 29 sputter component that is produced by unidirectionally first cold working a component blank to at least about an 80% reduction in cross-sectional area. The structures and advantages obtained by the unidirectional cold working to at least about 80% reduction is discussed in the present specification at least at page 5, line 8 to page 6, line 24. Column 3, lines 36-41 of Cole describe a maximum cold work level of 60%. In addition, Cole does not provide even a suggestion of unidirectional cold working. At least for such reasons, it is improper to allege that Cole discloses a sputter component having the structural features such as provided by claim 29. At least for such reason, Cole does not anticipate claim 29.

Claims 28 and 29 stand rejected under 35 USC 103(a) as being unpatentable over Cole. Applicant requests reconsideration. As may be appreciated from the records of the Office, the present application and Cole are commonly owned. Pursuant to an assignment recorded July 12, 2002 at Reel 013077, Frame 0930, Honeywell International Inc. is the common owner. Applicant asserts that as of at least October 27, 2000 (the filing date of

the present application) the subject matter of Cole was subject to an obligation of assignment to Honeywell International Inc. Accordingly, pursuant to 35 USC 103(c), Cole cannot be used in rejecting claims 28 and 29 as being unpatentable. At least for such reason, Applicant asserts that claims 28 and 29 are patentable and request allowance of such claims in the next Office Action.

In keeping with the assertions herein, Applicant asserts that all pending claims 28-43 are in condition for allowance and request such allowance in the next Office Action.

Respectfully submitted,

Dated: 12 May 2003 By: _____

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